

ABSTRACT

The present invention provides a method and treatment fluid for blocking the permeability of an elevated-temperature zone in a reservoir of a subterranean formation penetrated by a wellbore, the method comprising the steps of: a) selecting the zone to be treated, wherein the upper limit of the temperature range of the zone is equal to or greater than 190°F (88°C); b) forming a well treatment fluid comprising: water; a water-soluble polymer comprising polymerized vinyl amine units; and an organic compound capable of crosslinking with the vinyl amine units of the water-soluble polymer; c) selecting the water-soluble polymer and the organic compound of the well treatment fluid such that the gel time of the well treatment fluid is at least 2 hours when measured at the upper limit of the temperature range of the zone; and d) injecting the well treatment fluid through the wellbore and into the zone.